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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/509,089	06/22/2000	SIMON DANIEL BRUECKHEIMER	476-1900	7644

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LEE MANN SMITH MCWILLIAMS
SWEENEY & OHLSON
PO BOX 2786
CHICAGO, IL 60690-2786

EXAMINER

HOANG, THAI D

ART UNIT	PAPER NUMBER
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2667

DATE MAILED: 08/29/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/509,089

Applicant(s)

BRUECKHEIMER ET AL.

Examiner

Thai D Hoang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Application filed on 06/22/2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to because of informality: the descriptive legend "ATM header" in figure 3 does not point to any part in the figure. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 7 is objected to because of the following informality: the statements "the first octet of the payload" found no basic. Previous paragraphs did not define what the first octet of the payload is; therefore, the word "the" on line 21 page 16, is grammatically incorrect.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 7, the statement "the first octet of the payload" is not clear. Since a payload of an ATM cell has 48 bytes, therefore, the phrase "the first octet of the

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payload" is confusing because it does not indicate octet's position (most significant octet or least significant octet or any octet) in the payload.

Claim 8 is rejected because it depends on rejected claim 7.

Regarding claim 9, the statement "to indicate the presence or absence of the most-significant octet" is confusing, because it does not indicate the most-significant octet belongs to a channel identifier or a protocol identifier or a payload.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-5 and 10-11 are rejected under 35 U.S.C. 102(e) as being unpatentable over Lyons et al. US Patent No. 6,075,798, hereafter referred to as Lyons.

Regarding claims 1-3, 10 and 11, Lyons discloses a method of extended header for use in ATM adaptation layer type 2 packets. Lyons teaches that AAL-2 is partitioned

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into two sublayers, the Common Part Sublayer (CPS) and the Service Specific Convergence Sublayer (SSCS), wherein the CPS provides the functions of multiplexing variable length packets from multiple sources into a single ATM virtual circuit and relaying these packets to form end-to-end AAL-2 connections; fig. 1; col. 1, lines 22-24, 31-34; col. 3, lines 43-49 (a method of transporting point to point protocol (PPP) traffic over an asynchronous transport link, the method including encapsulating the traffic in variable length minicells, multiplexed minicells within the virtual circuit, and transporting minicells in a single virtual circuit.)

Regarding claim 4, Lyons discloses in figures 1 and 4 that the system comprises an AAL2/SSCS (Service Specific Convergence Sublayer) processor which implements an ATM Adaptation Layer (AAL) to map the services offered by the ATM network to the services required by the application (minicells form the payload of fixed length asynchronous transfer mode (ATM) cells.)

Regarding claim 5, Lyons discloses that in order support applications in native protocol mode, a Terminal Adapter (TA) at the network edge acts as an ATM user and implements an ATM Adaptation Layer (AAL) to map the services offered by the ATM network to the services required by the application. In cases where ATM is terminated at the end user equipment, the AAL entity is implemented there; col. 2, lines 51-57. In addition, Lyons teaches that the CPS provides the functions of multiplexing variable length packets from multiple sources into a single ATM virtual circuit and relaying these packets to form end-to-end AAL-2 connections; fig. 1; col. 1, lines 22-24, 31-34.

Furthermore, Lyons teaches that the CPS are used to provide signaling such as a

"More" bit to indicate that the current packet is segmented, signaling, or user information. The remaining portion (not shown) of the RES (reserved) field assigned to the SSCF provides an application specific function, a different instance of being provided to each AAL-2 user. An example of such function is identifying the voice-coding algorithm; col. 4, lines 35-41. Therefore, it indicates that the point to point traffic in the system disclosed by Lyons comprises at least a protocol identifier for indicating the protocol type of LLC packets transmitted from an end user terminal to another end user terminal corresponding with each of the packet headers of LLC packets in order to map the services offered by the ATM network to the services required by the application at the end user equipment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyons et al. US Patent No. 6,075,798, hereafter referred to as Lyons.

Regarding claims 6-7, as best understood, the ATM header in the system disclosed by Lyons inherently comprises a channel identifier located in VCI field according to the ATM header format. Lyons does not disclose the VCI field contains protocol identifier. However, Lyons teaches that the header size is extended dynamically; col. 10, lines 47-52; col. 11, lines 6-12, col. 12, lines 18-29. One of ordinary

skill in the art would be able to modify Lyons' method by changing the size of the fields of the header in order to allow the packets in different protocols transmitted in AAL-2 layer adapt with the ATM network.

Regarding claim 8, the VCI field of the ATM header in the system disclosed by Lyons inherently comprises an encode value to represent a virtual channel.

Regarding claim 9, as best understood, Lyons teaches the method uses a normal packet header and a dynamically extended packet header wherein the bit values of said normal and dynamically extended header are used to define a multiplicity of code-points for transmitting messages and sequence numbers from a transmitter to a receiver, the system comprises the step of making use of a second subset of code-points in said normal header to indicate presence of said dynamically extended header; col. 10, line 64 - col. 11, line 8. It implies that Lyons uses a code to indicate the header has been modified (extended) or not. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Lyons' method for advantages as cited above with respect to claim 6.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to the application:

US Patent No. 5,467,342 A, Logton et al disclose a methods and apparatus for time stamp correction in an asynchronous transfer mode network.

US Patent No. 5,878,041 A, Yamanaka et al disclose an error handling method used in ATM Network.

US Patent No. 5,870,474 A, Wasilewski et al disclose a method and apparatus for providing conditional access in connection-oriented, interactive networks with a multiplicity of service providers.

US Patent No. 5,946,309 A, Wesberg et al disclose a hybrid ATM adaptation layer method.


US Patent No. 5,742,599 A, Lin et al disclose a method and system for supporting constant bit rate encoded MPEG-2 transport over local ATM networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D Hoang whose telephone number is (703) 305-3232. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (703) 305-4378. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Thai Hoang


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 8/25/03